

CLAIMS

1. (Currently Amended): A method to control caching of URL information included in a response, the method comprising the steps of:

indicating in the response which of one or more cache proxies is to cache the URL information;

indicating in the response the conditions under which the URL information should be invalidated; and

transmitting the response to the one or more cache proxies of the URL information.

2. (Original): The method of Claim 1, wherein the response includes a URL comprising a significant portion identifier that specifies the portion of the URL that is to be used as a key for the URL information.

3. (Withdrawn): A method to control caching of URL information included in a response, the method comprising the steps of:

indicating in the response that the URL information is to be invalidated; and

transmitting the response to one or more cache proxies of the URL.

4. (Withdrawn): The method of Claim 3, wherein the response includes a URL comprising a significant portion identifier that specifies the portion of the URL that is to be used as a key for the URL information.

5. (Original): A method of managing a cache of a response having a URL, URL information associated with the URL, and a header, the method comprising the steps of:

identifying a cache proxy as serving a cache manager of the URL; and

indicating in the header whether the URL information is to be cached, is not to be cached, is to be cached by the cache proxy serving the cache manager, or is to be invalidated by the one or more cache proxies.

6. (Original): The method of Claim 5, wherein the URL is a partial URL, wherein the partial URL comprises a significant portion identifier that specifies the portion of the URL that is to be used as a key.

7. (Original): A method to control caching of URL information associated with one or more URLs of a response, the method comprising the steps of:

identifying a cache proxy as serving a cache manager for one or more URLs;

receiving by a first cache proxy the response comprising a header and the one or more URLs, the header comprising an indication of whether the URL information is to be cached, invalidated, or only cached by the cache proxy serving the cache manager;

in response to receiving a header comprising an indication that the URL information is to be cached, storing the URL information in the cache;

in response to receiving a header comprising an indication that the URL information is to be cached only by the cache proxy serving the cache manager, determining whether the first cache proxy is the cache proxy serving the cache manager;

in response to determining the first cache proxy is the cache proxy serving the cache manager, storing the URL information in the cache;

in response to determining the first cache proxy is not the cache proxy serving the cache manager, sending the response to the cache proxy serving the cache manager; and

in response to receiving a header comprising an indication that the URL information is to be invalidated, preventing the use of the URL information in cache in response to a second request.

8. (Original): The method of Claim 7, wherein the one or more URLs comprise one or more partial URLs, and wherein the one or more partial URLs comprises a significant portion identifier identifying the portion of the one or more URLs that is to be used as a key.

9. (Withdrawn): A method to control caching of URL information associated with one or more URLs of a response, the method comprising the steps of:

identifying a cache proxy as serving a cache manager for the one or more URLs;

receiving by a first cache proxy the response comprising a header, the one or more URLs, and the URL information, the header comprising an indication of whether URL information is to be cached only by the cache proxy serving the cache manager;

determining whether the first cache proxy is the cache proxy serving the cache manager;

in response to determining that the first cache proxy is the cache proxy serving the cache manager, storing the URL information in the cache; and

in response to determining that the first cache proxy is not the cache proxy serving the cache manager, sending the response to the cache proxy serving the cache manager.

10. (Withdrawn): The method of Claim 9, wherein the one or more URLs comprise one or more partial URLs, and wherein the one or more partial URLs comprise a significant portion identifier identifying the portion of the one or more URLs that is to be used as a key.

11. (Original): A method to control caching of URL information associated to one or more URLs of a response, the method comprising the steps of:

receiving the response comprising a header, the one or more URLs, and the URL information, the header having an indication of whether the URL information is to be invalidated; and

in response to receiving a header having an indication that the one or more URLs are to be invalidated, preventing the use of the cached URL information in response to a second request.

12. (Original): The method of Claim 11, wherein the one or more URLs comprise one or more partial URLs, and wherein the one or more partial URLs comprises a significant portion identifier identifying the portion of the one or more URLs that is to be used as a key.

13. (Currently Amended): An apparatus adapted to control caching of URL information included in a response, the apparatus comprising:

means for indicating in the response which of one or more cache proxies is to cache the URL information;

means for indicating in the response the conditions under which the URL information should be invalidated; and

means for transmitting the response to the one or more cache proxies.

14. (Original): The apparatus of Claim 13, wherein the response includes a URL comprising a significant portion identifier that specifies the portion of the URL that is to be used as a key for the URL information.

15. (Withdrawn): An apparatus adapted to control caching of URL information included in a response, the apparatus comprising:

means for indicating in the response that the URL information is to be invalidated; and
means for transmitting the response to one or more cache proxies.

16. (Withdrawn): The apparatus of Claim 15, wherein the response includes a URL comprising a significant portion identifier that specifies the portion of the URL that is to be used as a key for the URL information.

17. (Original): An apparatus adapted to manage a cache of a response having a URL, URL information associated with the URL, and a header, the apparatus comprising:

means for identifying a cache proxy as serving a cache manager for the URL; and
means for indicating in the header whether the URL information is to be cached, is not to be cached, is to be cached by the cache proxy serving the cache manager, or is to be invalidated by the cache proxy.

18. (Original): The apparatus of Claim 17, wherein the URL is a partial URL, wherein the partial URL comprises a significant portion identifier that specifies the portion of the URL that is to be used as a key.

19. (Original): An apparatus adapted to control caching of URL information associated with one or more URLs of a response, the apparatus comprising:

means for identifying a cache proxy as serving a cache manager for the one or more URLs;

means for receiving by a first cache proxy the response comprising a header and the one or more URLs, the header having an indication of whether the URL information is to be cached, invalidated, or cached by the cache proxy serving the cache manager;

in response to receiving a header comprising an indication that the URL information is to be cached, means for storing the URL information in the cache;

in response to receiving a header comprising an indication that the URL information is to be cached by the cache proxy serving the cache manager, means for determining whether the first cache proxy is the cache proxy serving the cache manager;

in response to determining the first cache proxy is the cache proxy serving the cache manager, means for storing the URL information in the cache;

in response to determining the first cache proxy is not the cache proxy serving the cache manager, means for sending the response to the cache proxy serving the cache manager; and

in response to receiving a header comprising an indication that the URL information is to be invalidated, means for preventing the use of the URL information in cache in response to a second request.

20. (Original): The apparatus of Claim 19, wherein the one or more URLs comprise one or more partial URLs, and wherein the one or more partial URLs comprises a significant portion identifier identifying the portion of the one or more URLs that is to be used as a key.

21. (Withdrawn): An apparatus adapted to control caching of URL information associated with one or more URLs of a response, the apparatus comprising:

means for identifying a cache proxy as serving a cache manager for the one or more URLs;

means for receiving by a first cache proxy the response comprising a header, the one or more URLs, and the URL information, the header having an indication of whether URL information is to be cached only by the cache proxy serving the cache manager;

in response to receiving a header comprising an indication that the URL information is to be cached by the cache proxy serving the cache manager, means for determining whether the first cache proxy is the cache proxy serving the cache manager;

in response to determining the first cache proxy is the cache proxy serving the cache manager, means for storing the URL information in the cache; and

in response to determining the first cache proxy is not the cache proxy serving the cache manager, means for sending the response to the cache manager.

22. (Withdrawn): The apparatus of Claim 22, wherein the one or more URLs comprise one or more partial URLs, and wherein the one or more partial URLs comprises a significant portion identifier identifying the portion of the one or more URLs that is to be used as a key.

23. (Original): An apparatus adapted to control caching of URL information associated to one or more URLs of a response, the apparatus comprising:

means for receiving the response comprising a header, the one or more URLs, and the URL information, the header comprising an indication of whether the URL information is to be invalidated; and

in response to receiving a header comprising an indication that the one or more URLs are to be invalidated, means for preventing the use of the cached URL information in response to a second request.

24. (Original): The apparatus of Claim 23, wherein the one or more URLs comprise one or more partial URLs, and wherein the one or more partial URLs comprises a significant portion identifier identifying the portion of the one or more URLs that is to be used as a key.